

Title (en)

COOLING CIRCUIT AND MOTOR COOLING METHOD FOR A COMPRESSOR MOTOR

Title (de)

KÜHLKREISLAUF UND MOTORKÜHLUNGSVERFAHREN FÜR EINEN KOMPRESSORMOTOR

Title (fr)

CIRCUIT DE REFROIDISSEMENT ET PROCÉDÉ DE REFROIDISSEMENT DE MOTEUR DE COMPRESSEUR

Publication

**EP 3022833 A2 20160525 (EN)**

Application

**EP 13786583 A 20131023**

Priority

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- US 2013066310 W 20131023

Abstract (en)

[origin: WO2014084989A2] A method for cooling a compressor motor (170) and a cooling circuit utilizing refrigerant that originates in the condenser (30) to cool a motor (170) and electromagnetic bearings (196, 206). The motor drives a compressor (20), while the electromagnetic bearings support the motor rotor (178) during operation of the compressor. Liquid refrigerant from the condenser is expanded into a two-phase mixture, passed over the stator, expanded a second time, passed over the bearings and between the stator and rotor, before being returned to an evaporator (50).

IPC 8 full level

**H02K 9/20** (2006.01); **H02K 5/20** (2006.01)

CPC (source: EP US)

**F04D 25/06** (2013.01 - EP US); **F04D 29/058** (2013.01 - EP US); **F04D 29/5806** (2013.01 - EP US); **F04D 29/584** (2013.01 - EP US); **F16C 37/005** (2013.01 - EP); **F25B 31/008** (2013.01 - EP US); **H02K 5/203** (2021.01 - EP US); **H02K 7/09** (2013.01 - EP US); **H02K 9/10** (2013.01 - US); **H02K 9/20** (2013.01 - EP US); **H02K 11/00** (2013.01 - US)

Citation (search report)

See references of WO 2014084989A2

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DOCDB simple family (publication)

**WO 2014084989 A2 20140605**; **WO 2014084989 A3 20141224**; EP 3022833 A2 20160525; EP 3022833 B1 20171206; TW 201434248 A 20140901; TW I500244 B 20150911; US 2015226467 A1 20150813; US 9395111 B2 20160719

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